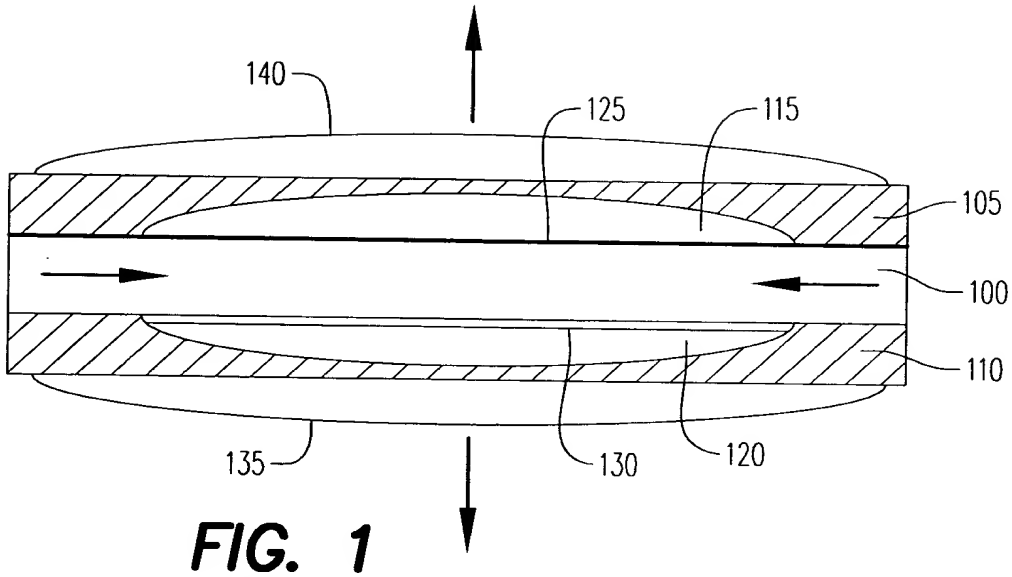


FIG. 1
(PRIOR ART)

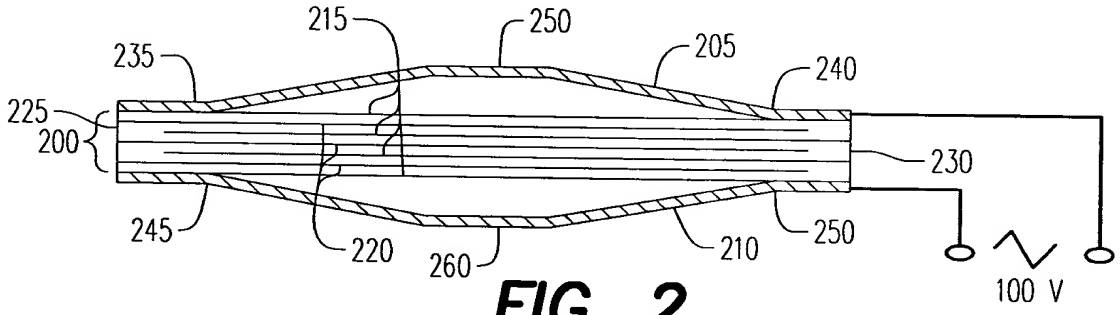


FIG. 2
(PRIOR ART)

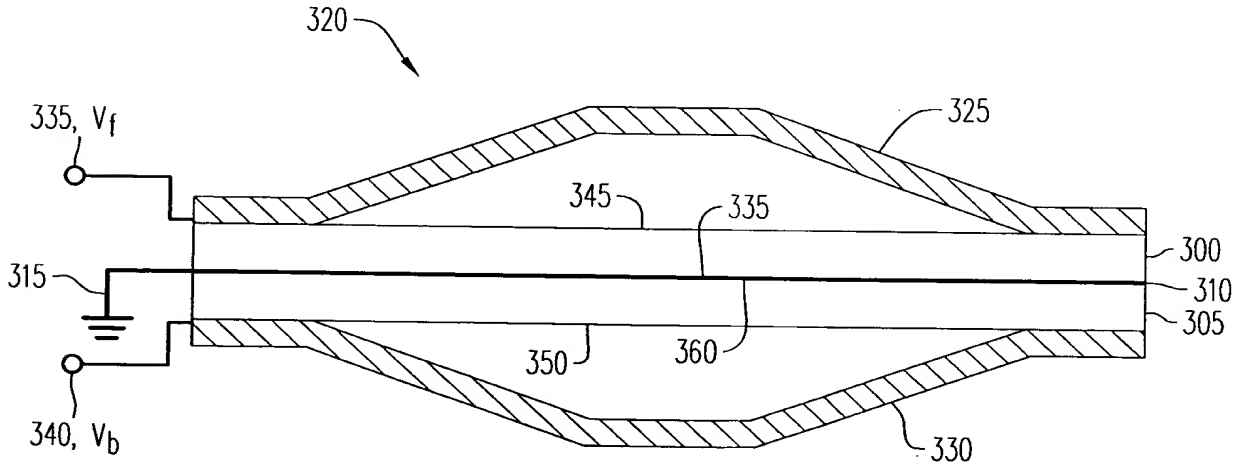
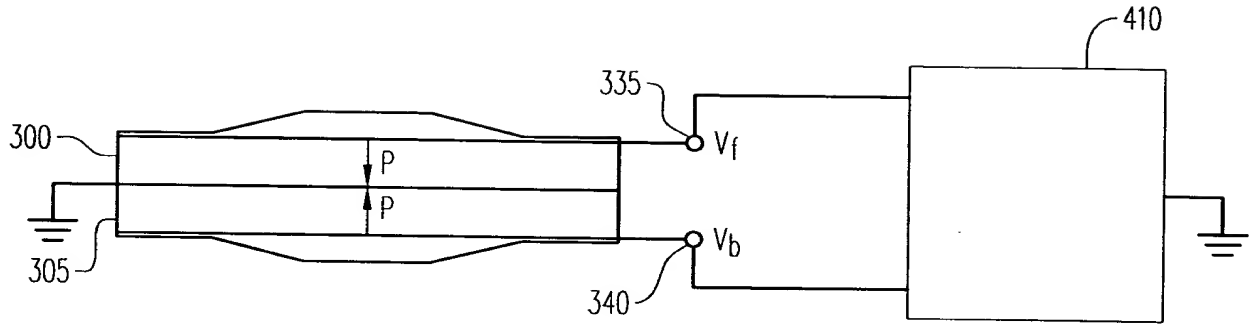
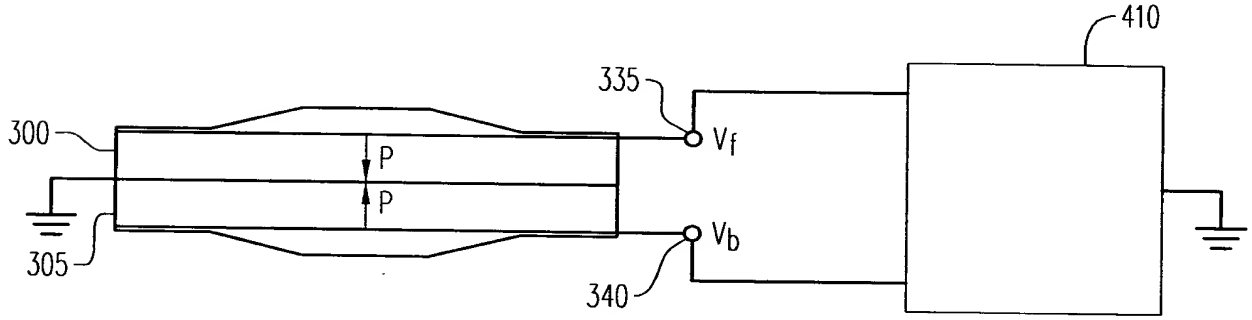


FIG. 3



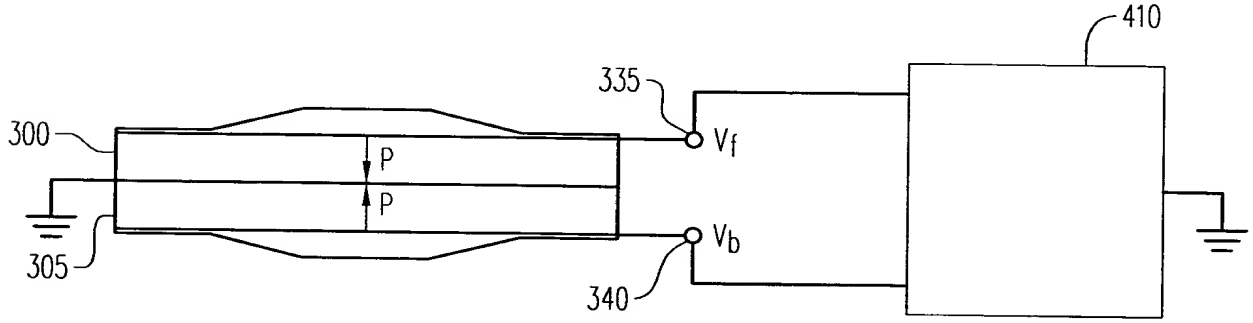
MONOPOLE. (IN PHASE. SAME AMPLITUDE), $V_b = V_f = V_m$, $\varphi = 0$

FIG. 4A



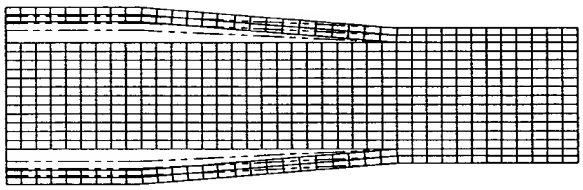
DIPOLE. (OUT OF PHASE. SAME AMPLITUDE), $V_b = -V_d$, $V_f = V_d$, $\varphi = \pi$

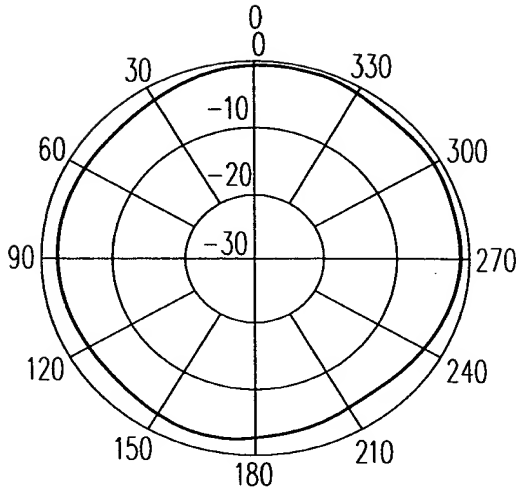
FIG. 4B



CARDIOID. $V_b / V_f = (1-R)/(1+R)$, WHERE $R = TVR_m / TVR_d$, $0 < \varphi < \pi$

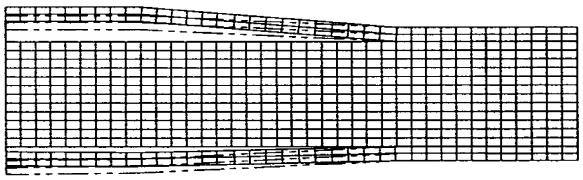
FIG. 4C

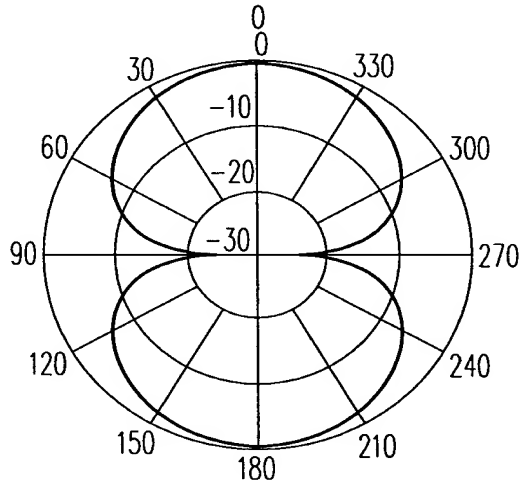




MONOPOLE MODE

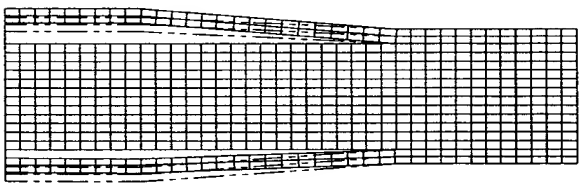
FIG. 5A

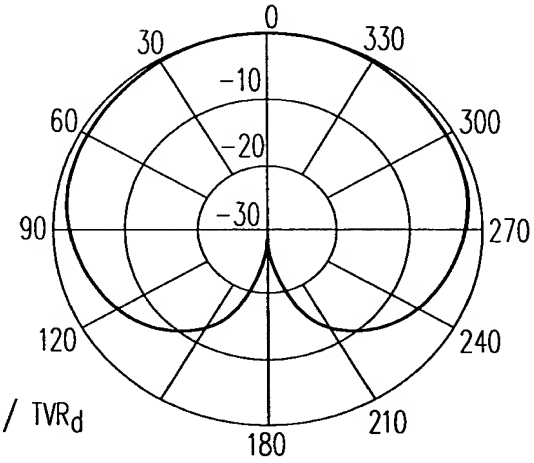




DIPOLE MODE

FIG. 5B





CARDIOID MODE. $V_b / V_f = (1-R)/(1+R)$, WHERE $R = TVR_m / TVR_d$

FIG. 5C

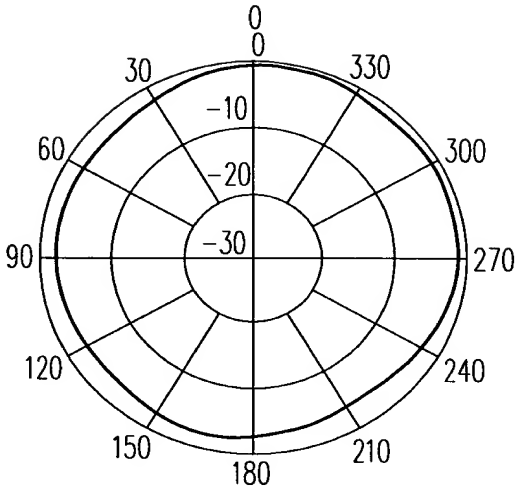


FIG. 6A

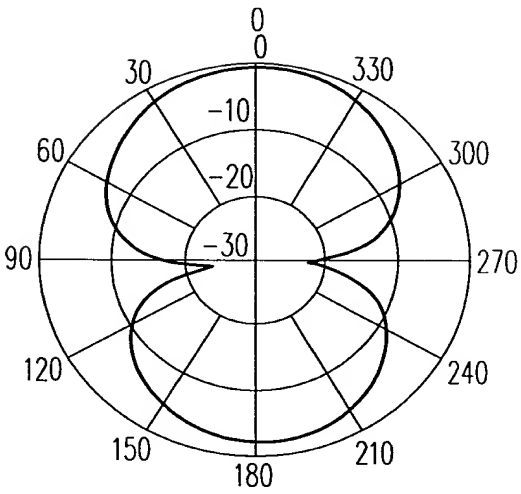


FIG. 6B

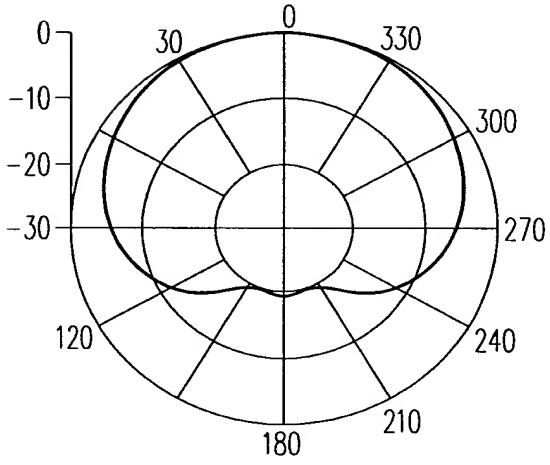


FIG. 7A

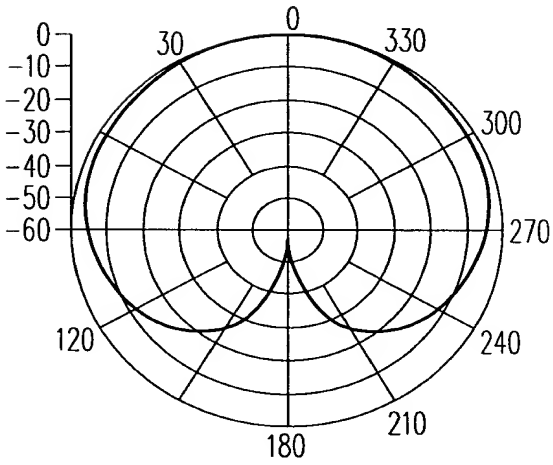
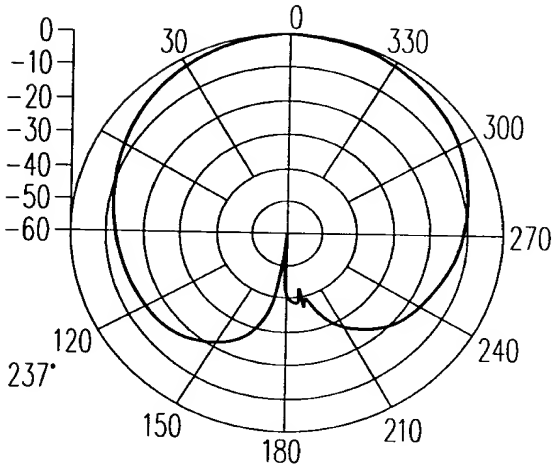
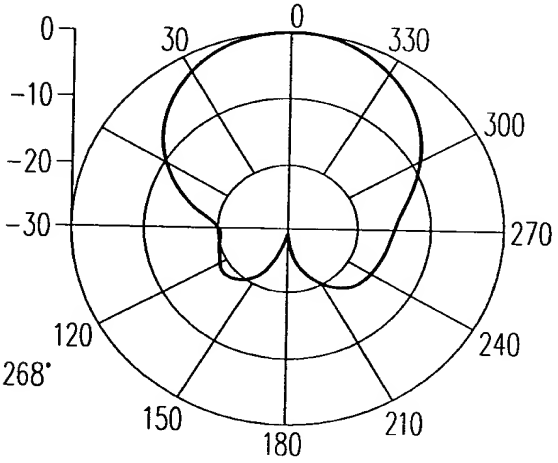


FIG. 7B



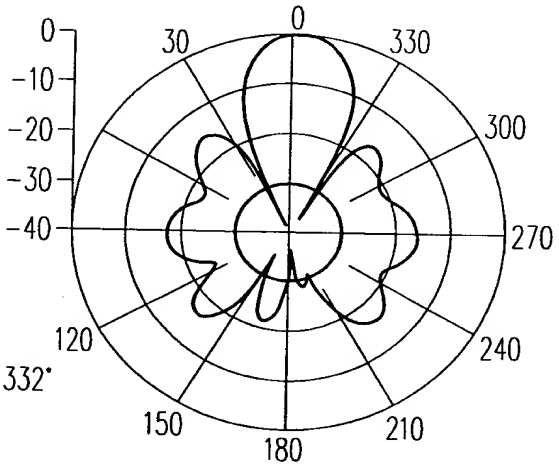
15kHz, V_f = 100 V, V_b = 55V, φ = 237°

FIG. 8A



20kHz, V_f = 100 V, V_b =38V, φ = 268°

FIG. 8B



80kHz, V_f = 98 V, V_b =100V, φ = 332°

FIG. 8C

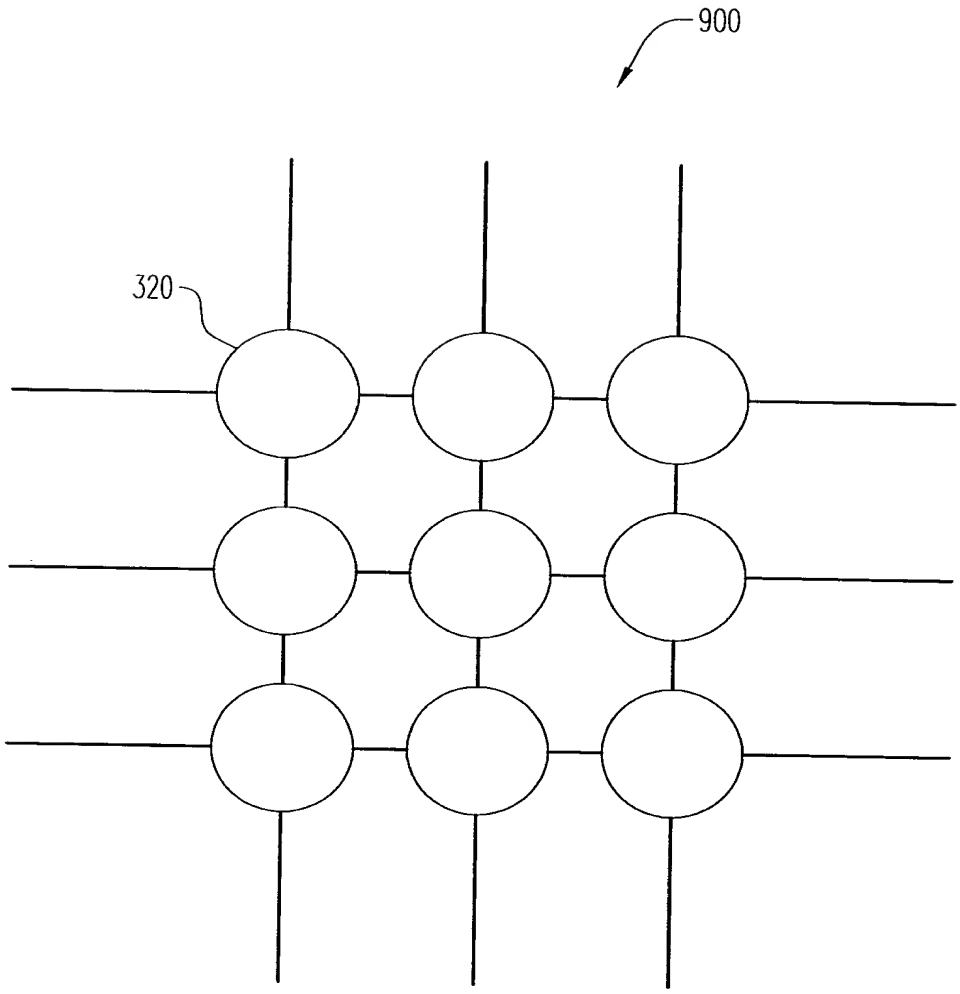


FIG. 9